# The Harridge, Rochdale

## Preliminary Ecological Appraisal Report

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**Control Sheet**

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| Prepared By: | <br>Rozanna Shah – Ecologist<br>*The advice which I have prepared and provided is true, and has been prepared and provided in accordance with the CIEEM Code of Professional Conduct. I confirm that the opinions expressed are my true and professional bona fide opinions.* |
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This report aims to provide general advice on ecological constraints associated with any development of the site and may include recommendations for further survey; it is not intended that this report should be submitted with a planning application for development of the site, unless supported by the results of the further surveys and a detailed assessment of the effects of the proposed development. Opinions and information provided in the report are based on Milner Ecology Ltd using all reasonable skill, care and diligence in the preparation of the same in compliance with the CIEEM Code of Professional Conduct and BS42020. It should be noted, that whilst every effort is made to meet the client's brief, no site investigation can ensure complete assessment or prediction of the natural environment.

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# 1 Introduction

Milner Ecology Ltd was commissioned by Mr Matthews, to undertake an ecological appraisal of proposed building works at No 3, The Harridge, Rochdale (NGR: SD883151).

The works will entail the construction of a 6-car garage within a large residential garden adjacent to the client's property.

The proposed works are located within the residential housing estate on the outskirts of Rochdale off Shawclough Road. The proposed works are surrounded by further residential buildings with mature gardens, arable fields, residential infrastructure and urban greenfield sites including Brotherod woodland.

An ecological constraints assessment survey was undertaken, including a desk study to search for wildlife sites and protected species records.

The aim of the survey and desk study was to assess wildlife interests at the site with particular reference to legal requirements and potential development constraints.

# 2 Methodology

This Preliminary Ecological Appraisal (PEA) was undertaken following the CIEEM PEA guidance (CIEEM 2013) and the appropriate British Standard, BS42020 (BSI 2013). The report was produced following the CIEEM recommendations on ecological report writing (CIEEM 2015).

## 2.1 Desk study

A targeted desk study was undertaken of the site and a 1km buffer zone involving an online search of the Multi Agency Geographical Information Centre (magic.defra.gov.uk) and Ordnance Survey 1:25000 maps of the area. The UK and Local Biodiversity Action Plans were also consulted.

Information regarding protected species was also sought from the record holders for the area, Greater Manchester Local Records Centre (GMLRC).

The aim of the desk study was to identify the presence of statutory wildlife sites and any legally protected and notable species records for the area.

## 2.2 Staff

The project was managed by Ben Milner BSc (Hons.) CEnv MCIEEM, Principal Ecologist and Managing Director of Milner Ecology Ltd. The field survey works were undertaken by Rozanna Shah BSc (Hons.) GradCIEEM a Consultant Ecologist at Milner Ecology.

Mr Milner is a chartered environmentalist with over eighteen years' experience of undertaking ecological assessment projects and has been involved in over 500 environmental projects including pipelines, highways, housing, leisure and retail. He has experience of working with the full range of legally protected and other species and has significant experience in the field of environmental management and project supervision, particularly on large scale projects such as cross-country pipelines. Mr Milner holds current survey/disturbance licences for great crested newt and bats from Natural Resources Wales (NRW) and Natural England (NE), and has held development licences for badger, bats and great crested newt from NE and NRW. In addition, Mr Milner holds a current CSCS/LISS Professionally Qualified Person (White) card.

Miss Shah is a professional ecologist and GIS consultant with five years of experience undertaking ecological assessment projects and has been involved in projects including rail lines, pipelines, highways and housing developments. Miss Shah has particular expertise in botanical survey, holds a current survey/disturbance licences for great crested newt from Natural England (NE), holds a LANTRA NPTC Tree Climbing and Aerial Rescue Level 2 certificate for bat roost survey in trees and a CSCS/LISS Construction Related Occupation Visitors (Yellow) card [Card No. 05868838].

Mr Milner and Miss Shah exceed the requirements for knowledge, skills and practical experience as set out in the CIEEM Technical Guidance Series (CIEEM 2011) for all surveys undertaken.

## 2.3 Walkover Survey

The walkover habitat survey was undertaken on the 21st January 2019, the weather was cold (3ºC), overcast cloud 8/8 and light winds throughout the day. The timing of the survey was outside the optimal period for completing such a survey but still allows for a robust assessment of the habitats present and their potential to support legally protected species.

### 2.3.1 Habitats

The survey followed Phase 1 habitat survey methodology (JNCC, 2010). This involved walking the area within 50m of the proposed works mapping and describing different habitats (for example: woodland, grassland, scrub).

The survey was extended such that evidence of fauna and faunal habitat was also recorded (for example droppings, tracks or specialist habitat such as ponds for breeding amphibians). This modified approach to the Phase 1 survey follows the approach recommended by the Guidelines for Baseline Ecological Assessment (IEA, 1995). Details of the extended survey techniques are given below.

### 2.3.2 Invasive Species

Any invasive non-native species identified under Schedule 9 of the Wildlife and Countryside Act (1981 as amended) were identified within 50m of the proposed works.

### 2.3.3 Badger

A detailed badger *Meles meles* survey was undertaken. This involved an initial walkover survey to identify sett locations, together with other field signs present such as paths, hairs, footprints, latrines etc. Where field signs were encountered, these were investigated further, particularly with respect to establishing the location of any main setts. Areas of particularly high badger activity were noted. Potential badger commuting routes and foraging habitat, both on and adjacent to the site were noted. All woodlands with potential for badgers within 100m of the works, where accessible, were surveyed to gain picture of badger activity in the area.

### 2.3.4 Dormouse

All areas of suitable habitat within 50m of the proposed works were assessed for their capacity to support dormouse *Muscardinus avellanarius* and if required were subject to a truncated version of the nut search detailed in the Dormouse Conservation Handbook (2003) whereby adventitious sightings of the characteristically gnawed nuts in areas beneath hazel were recorded.

### 2.3.5 Otter

A standard walkover survey for otter *Lutra lutra* (Chanin 2003) was undertaken on all water courses within 50m of the works, where accessible. This involved walking the banks and using close focus binoculars to identify field signs such as spraints, holts, footprints and actual or potential resting sites. The survey encompassed the entire length of the stream within 100m of the crossing point and was extended to include any suitable habitat outwith the immediate stream bank.

### 2.3.6 Water Vole

All ditches and ponds identified within 50m of the site from relevant Ordnance Survey maps or during the walkover and which were suitable for water vole *Arvicola aquaticus* were surveyed where accessible. At all sites which offered potential habitat, a standard survey was undertaken to search for field signs such as direct observations, sounds of the species entering water, latrines, tunnel entrances, cropped "gardens" around tunnel entrances, feeding stations, paths along the water's edge, runs in vegetation and footprints in mud as recommended in Water Vole Conservation Handbook (Strachan 2011).

### 2.3.7 Bats

Trees surrounding the proposed route were assessed for features such as dead branches and extensive cracks and crevices, which would provide suitable roosting opportunities for bats. These features were then examined for signs of bat use as identified in the Bat Conservation Trust Survey Guidance (3rd Edition 2016).

Each feature of interest was numbered and photographed with detailed notes compiled to assess the likelihood of usage by bats.

### 2.3.8 Birds

Birds using the site at the time of survey were recorded by sight and sound and plotted onto site maps.

### 2.3.9 Amphibians

All ponds and their surrounding terrestrial habitat identified within 250m of the proposed works from relevant Ordnance Survey maps or during the walkover were assessed for their capacity to support amphibians, particularly great crested newt *Triturus cristatus,* where accessible. The surveys entailed a detailed site walkover, a terrestrial assessment of the habitats present and a hand search of any suitable refugia.

Habitat Suitability Index (HSI) information was gathered during the surveys. The HSI is quantitative measure of habitat quality for great crested newt (Oldham *et al.* 2000). The HSI is number between 0 and 1, derived from an assessment of ten habitat variables known to influence the presence of great crested newts. An HSI of 1 is optimal habitat (high probability of occurrence), while an HSI of 0 is very poor habitat (minimal probability of occurrence). The HSI is calculated on a single pond basis, but considers surrounding terrestrial habitat and local pond density. The HSI score assessment for this project was undertaken using the slightly simplified version adapted for the National Amphibian and Reptile Recording Scheme (2007).

### 2.3.10 Reptiles

An initial walkover survey was undertaken to identify and assess the potential impacts on reptiles. This included a habitat suitability assessment (HSA) in-line with the draft reptile mitigation prepared by Natural England for the Herptofaunas Workers Meeting (2010) to identify features such as; location in relation to species range, vegetation structure, insolation, aspect, topography, connectivity to nearby good quality habitat, prey abundance and disturbance regime.

# 3 Baseline Ecological Conditions

When assessing the likely presence/absence of species during the walkover survey, habitat was assessed in accordance with the risk assessment categories detailed in Table 1 below.

| Risk category | Definition |
|---|---|
| Present | Presence confirmed in the course of current survey or recent, confirmed records. |
| High | On-site habitat of high quality for a given species/species group. Site within/peripheral to a national or regional population stronghold. Good quality surrounding habitat and good connectivity. |
| Moderate | On-site habitat of moderate quality, providing most or all of the known key requirements of a given species/species group. Local returns from the data search, within national distribution, suitable surrounding habitat. Factors limiting the likelihood of occurrence may include small habitat area, habitat severance, disturbance etc. |
| Low | On-site habitat of poor to moderate quality for a given species/species group. Few or no returns from data search but presence cannot be discounted on the basis of national distribution, nature of surrounding habitats, habitat fragmentation, recent on-site disturbance etc. |
| Negligible | While presence cannot be absolutely discounted, the site includes very limited or poor quality habitat for a particular species or species group. No local returns from a data search, outside or peripheral to known national range for a species, surrounding habitat considered unlikely to support wider populations of a species/species group. |
| Unknown | Insufficient data to make a determination of the risk of a species presence or absence. |

**Table 1:** Criteria for assessing presence of protected species.

## 3.1 Statutory and Non-Statutory Wildlife Sites

The data search identified one statutory designated Local Nature Reserve (LNR) site within 1km of the site and one Site of Special Interest Impact Zone.

- **Healey Dell LNR [Ref: 1008946]** – A 26.4ha site supporting a woodland habitat along the River Spodden. The site lies 0.1km to the west of the proposed works and includes steep sided broad-leaved woodland, waterfalls and archaeology of ancient mills along with a disused railway line and viaduct.
- **Rochdale Canal SSSI Impact Zone [Ref: 1007365] –** The standing water and 20km canal of Rochdale passes through urban and industrial parts of Rochdale and Oldham and contains important habitats for submerged aquatic plants and emergent vegetation, including colonies of the nationally scarce SAC species floating water plantain *Luronium natans* and an assemblage of pondweeds.

The data search did not identify any non-statutory Local Wildlife Sites within 1km of the site.

## 3.2 Habitats

The Phase 1 Habitat plan for the study site is presented as Figure 2 including target notes (TN) summarising key interest features for wildlife

| Target Note | Description |
|---|---|
| TN1 | Hardstanding car parking area. |
| TN2 | A line of *Rhododendron spp.* and holly *Ilex aquifolium* and occasional beech *Fagus sylvatica* shrubs surrounded the east side of the site with an understorey of occasional brambles *Rubus fruticosus*.<br>Direct impacts are anticipated to the surrounding vegetation to enable access to the site and construct the garages. |

| | |
|---|---|
| | If the shrubs are to be impacted by the proposed works between March- September then a further breeding survey would be required before works commence.<br>Further recommendations for breeding birds can be found in below. |
| TN3 | A line of mature trees ran along the entrance to the site overhanging the main road. Species included sycamore *Acer pseudoplatanus*, lime *Tilia x europaea* and cedar.<br>No impacts are anticipated to the trees if the works are contained to the central section of the site. |
| TN4 | An amenity grassland lay adjacent to the hardstanding car parking area, surrounded by scattered shrubs. The grassland was composed of perennial rye grass *Lolium perenne*, daisy *Bellis perennis,* dandelion *Taraxacum spp.* white clover Trifolium repens. and annual meadow grass *Poa annua*. |
| TN5 | A wooden fence ran across the proposed entrance to the site works with concrete foundations. A further wooden fence ran along the western edge of the site. |
| TN6 | A small crumbling drystone wall ran along the entrance to the site beneath the mature trees at TN3. The wall provides potential refugia habitat for reptiles.<br>No impacts are anticipated to the wall if the works are contained to the central section of the site. |
| TN7 | The majority of the central section of the site was composed of laid gravel and sand with minimal ground flora. |
| TN8 | Five mature sycamore trees with potential features for roosting bats lay as a group towards the south of the site. The trees provided moderate potential to support roosting bats with branch tear-outs, pruning cuts, butt rot and knot holes.<br>No impacts are anticipated to the sycamores if the works utilized the gap between the mature trees along the gravel at TN7.<br>If the works are to impact the mature sycamores, then further surveys to ascertain whether bats are roosting in the trees will be required.<br>If these trees are to be impacted by the proposed works between March- September then a further breeding survey would be required before works commence.<br>Further recommendations for breeding birds and bats can be found in below. |
| TN9 | A planted line of semi-mature cedar trees ran along the south-western corner of the site with a ground flora of wood avens *Geum urbanum,* occasional nettles *Urticia diocia* and piles of brash. |

**Table 2:** Target Notes.

## 3.3 Invasive Species

The data search did not identify any records of invasive species under Schedule 9 of the Wildlife and Countryside Act (1981 as amended) from within 1km of the site.

No invasive species were identified during the site walkover survey.

Therefore, the risk of encountering invasive species within the working area is considered to be negligible and no further consideration is given to this species group.

## 3.4 Badger

The data search identified 9 records of badger activity within 1km of the proposed works.

No evidence of badger activity; i.e. setts, latrines, hairs or prints, were noted during the surveys.

Therefore, with no evidence of badger recorded the risk of encountering badger within the working area is considered negligible and no further consideration is given to this species.

## 3.5 Dormouse

The data search did not reveal any records of dormouse from within 1km of the works.

No evidence of dormouse was noted during the surveys and no suitable habitat will be impacted.

Therefore, due to the lack of likely impacts to potential habitat, the risk of encountering dormouse within the working area is considered negligible and no further consideration is given to this species.

## 3.6 Otter

The data search did not reveal any records of otter from within 1km of the works.

No evidence of otter was noted during the survey, and no habitat suitable for potential otter holts will be impacted by the works.

As no holts or other resting places were identified within the working area, no predicted impacts are anticipated to this species, the risk of encountering otter is considered negligible and no further consideration is given to this species.

## 3.7 Water Vole

The data search identified two records of water vole from within 1km of the works. The closest of the records were to the north west of the proposed works along the River Spodden within Healey Dell LNR.

No evidence of water vole was noted in the vicinity of the works during the survey, and no potential habitats will be impacted.

Therefore, with no records in the vicinity of the works, the risk of encountering water vole within the working area is considered negligible and no further consideration is given to this species.

## 3.8 Bats

The data search identified numerous records of bat sightings or roosts from within 2km of the site. This included 44 records of common pipistrelle *Pipistrellus pipistrellus*, five soprano pipistrelle *Pipistrellus pygmaeus*, six records of Noctule *Nyctalus noctule*, seven records of Daubenton's Bat *Myotis daubentonii*, two records of Whiskered bat *Myotis mystacinus*, and three unidentified records of bat activity from within 1km of the site.

The mature sycamore trees at TN8 provide potential features for roosting bats and would class as having 'Moderate' likelihood of bats being present using the data in Table 4.1 of the BCT Guidance (2016). 'Moderate' habitats are described as:

- '*A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status';*
- *'Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water*.'

The trees have been numbered by a previous arboriculture survey and the survey numbers used in that report[1] are referenced below.

- **Nº. 990** - The tree would classify as moderate to high potential under the BCT guidance with a large pruning cut approximately 9m high, facing south towards the south of the site. The tree is not currently scheduled to be removed for construction. However, if it was to be removed then a climbing survey will be required to ascertain the usage by roosting bats.
- **Nº. 991** - Low to negligible condition with one small tear out feature high in the canopy (15m+) unlikely to offer roost potential as it was open to the weather ensuring wet conditions unsuitable for roosting bats.
- **Nº. 992** - Low to negligible potential with one very small knot hole feature at eye level was inspected and visible with a torch to not be sufficiently large enough to support a roost. No evidence of roosting bats including droppings were observed.
- **Nº. 993** - A tree with low potential and in a poor structural condition with rotten trunk at base and therefore inaccessible for further tree climbing inspection. A large up facing tear out feature 4m up on the north facing side of the tree. The tree is not currently scheduled to be removed for construction. However, if it was to be removed then survey access by would be required.

[1] ACS Consulting (2018) No. 3 The Harridge, Rochdale - Arboricultural Report [Ref: ARB/3803/Y/100, Issued june 2018].

- **Nº. 994** - Low potential and in a poor structural condition with large wet upward facing tear out feature 2m on the north facing side. The tree is not currently scheduled to be removed for construction. However, if it was to be removed then survey access by would be required.

No trees or structures with features suitable for roosting or hibernating bats will be impacted if current gaps in the site are utilised for the works.

On the basis of the survey information and current impacts of the project, the risks of encountering bats on this project are considered to be minimal and measures should be undertaken to minimize potential impacts to this species group, see recommendations given in Section 4.3 below.

## 3.9 Birds

The data search identified numerous records of protected birds from the immediate vicinity of the works, the most relevant were four records of house sparrow *Passer domesticus,* one record of starling *Sturnus vulgaris,* three records of skylark *Alauda arvensis,* one record of lesser-spotted woodpecker *Dryobates minor* and two records of lesser redpoll *Acanthis cabaret* which were recorded within 1km from the. These species are listed as BoCC Red List species [2] and may breed within the trees and scrub onsite.

In addition, four records of bullfinch *Pyrrhula Pyrrhula,* seven records of dunnock *Prunella modularis*, one record of reed bunting *Emberiza schoeniclus* and one record of wood warbler *Phylloscopus sibilatrix* were identified from with 1km of the site. All of which are listed as BoCC amber List species which may breed in or utilise the habitats on site.

Several records of Schedule 1 Birds on the Wildlife and Countryside Act 1981 (as amended), were also recorded, including one record of peregrine falcon *Falco peregrinus* and one record of kingfisher *Alcedo atthis*. It is an offence to disturb the nest of a Schedule 1 Bird whilst it is breeding or supporting dependant young, however there is no habitat suitable for either species within the site.

A number of birds were observed and noted calling during the survey. These included; carrion crow *Corvus corone,* house sparrow *Passer domesticus* and blackbird *Turdus merula.*

It is likely that the denser areas of shrubs and mature trees present within the site would support a range of species during the breeding season. Therefore, consideration of appropriate mitigation is given in Section 4.4 below.

## 3.10 Amphibians

The data search did not reveal any records of amphibians from within 1km of the works.

No waterbodies are to be impacted by the works and no amphibians were noted during the site walkover, however at this time of year amphibians will be beginning to enter their winter hibernation refuges so a negative result is to be expected, even if present.

Therefore, the risk of encountering this species within the working area is considered to be negligible and no further consideration is given to this species group.

## 3.11 Reptiles

The data search did not reveal any records of reptiles from within 1km of the works.

No evidence of reptiles was noted during the survey, and no potential habitats will be impacted.

Therefore, the risk of encountering this species within the working area is considered to be negligible and no further consideration is given to this species group.

[2] BTO, et al (2015) *The Birds of Conservation Concern 4.* British Trust for Ornithology. https://www.bto.org/science/monitoring/psob.

# 4 Assessment of Effects and Mitigation Measures

## 4.1 Protected Sites

There will be no impacts to nearby protected sites. No access will be required to the nearby LNR and therefore no impacts are anticipated as all works will lie outside the site boundary.

## 4.2 Habitats

### 4.2.1 Amenity Grassland

The proposed works are anticipated to impact the amenity grassland. The amenity grassland is of low ecological diversity and intrinsic value and therefore it is anticipated the works will not have significant losses in regard to species richness and potential habitat for protected species.

### 4.2.2 Trees and Shrubs

The denser areas of shrubs and line of semi-mature trees at TN2, TN3, TN8 and TN9 are of moderate ecological value both intrinsically and as breeding bird habitat (see Section 4.4 below).

However, no direct impacts are predicted to any of the trees or scrub surrounding the proposed works, and therefore no specific mitigation is required. Works should however take into account potential impact on bats (see Section 4.3 below) and breeding birds (see Section 4.4 below).

## 4.3 Bats

All British bats are European Protected Species under the Conservation of Species and Habitats Regulations 2010 and Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). It is an offence to intentionally kill, injure or take a bat. It is also an offence to intentionally or recklessly damage, destroy or obstruct access to any place that a bat uses for shelter or protection or to disturb a bat whilst it is occupying such a place.

The mature sycamore trees at TN8 (specifically Trees N$^{o.}$ 990, 993 and 994) provide potential features for roosting bats and would class as having 'Moderate' likelihood of bats being present using the data in Table 4.1 of the BCT Guidance (2016).

The current development proposals will not remove any trees from the site and therefore no further survey is required.

As the current works plan will avoid impacts to the trees it is recommended that the site plan incorporates an appropriately delineated and signed restricted zone within 10m of the trees with roost potential. Within the restricted zone vehicle movements and storage should be minimized and contractors made aware of the of the potential for bats to be present and the correct procedures to follow should bats be found on site (see Appendix 2).

In addition, all site personnel should be made aware of the value of the trees and no direct disturbance of the trees should be allowed.

For any the mature trees to be retained, suitable root protection zones should be established and delineated with appropriate fencing and signage in accordance with BS 5837[3] for all retained trees.

If the construction plan changes and the trees are to be lost for a later stage in the works then measures must be undertaken to identify the usage of the site by bats prior to any disturbance, especially if mature trees are to be removed. Determining the presence/likely absence of a bat roost is a material consideration for planning applications. Any trees would be subject to a standard 'climb and inspect' survey by a suitably licensed ecologist (as detailed in BCT guidance). The surveys could only be undertaken during the period April to September and if bats are encountered further survey work to determine the type and size of the roost will be required to provide information for a EPS licence application to Natural England which would be required before any works are possible.

In the case of trees whereby no tree climbing survey is possible due to the severe butt rot and large base cavities, an endoscopic survey of the cavities accessible from ground level or using a ladder may be undertaken on each survey visit along with remote inspection of any further PRFs using binoculars to observe any obvious signs of bat usage, i.e. scratches or staining.

[3] BS 5837:2012 Trees in relation to design, demolition and construction - Recommendations.

## 4.4 Breeding Birds

The Wildlife & Countryside Act (1981, as amended) gives general protection to all wild birds from killing, injuring or taking; destroying, damaging or taking nests in use or being built; and taking or destroying eggs.

No potential breeding bird habitat is scheduled to be destroyed by this project. However, if localised tree and scrub removal at TN2, TN3, TN8 and TN9 is required to provide access and permit construction then in order to prevent any impacts upon breeding birds any removal of breeding bird habitat should take place outside of the breeding bird season (March until September).

If this approach is not possible and works will be undertaken during the breeding season, a visual inspection will be required to ensure that no birds are nesting within the shrubs. This will necessitate a slow 'cut and examine' technique whereby the vegetation to be removed is examined by the supervising ecologist to check that no nests are present. If a nest is discovered a two meter buffer will be left around the nest to prevent isolation which may cause the adult birds to abandon the nest. The nest will be left in place until the chicks have fledged. This will be determined via reference to the BTO website[4] which gives incubation and fledging timescales for all British species. Once the chicks are expected to have fledged the nest will be rechecked and, if clear, the vegetation removed.

[4] http://blx1.bto.org/birdfacts/indexa_short.htm

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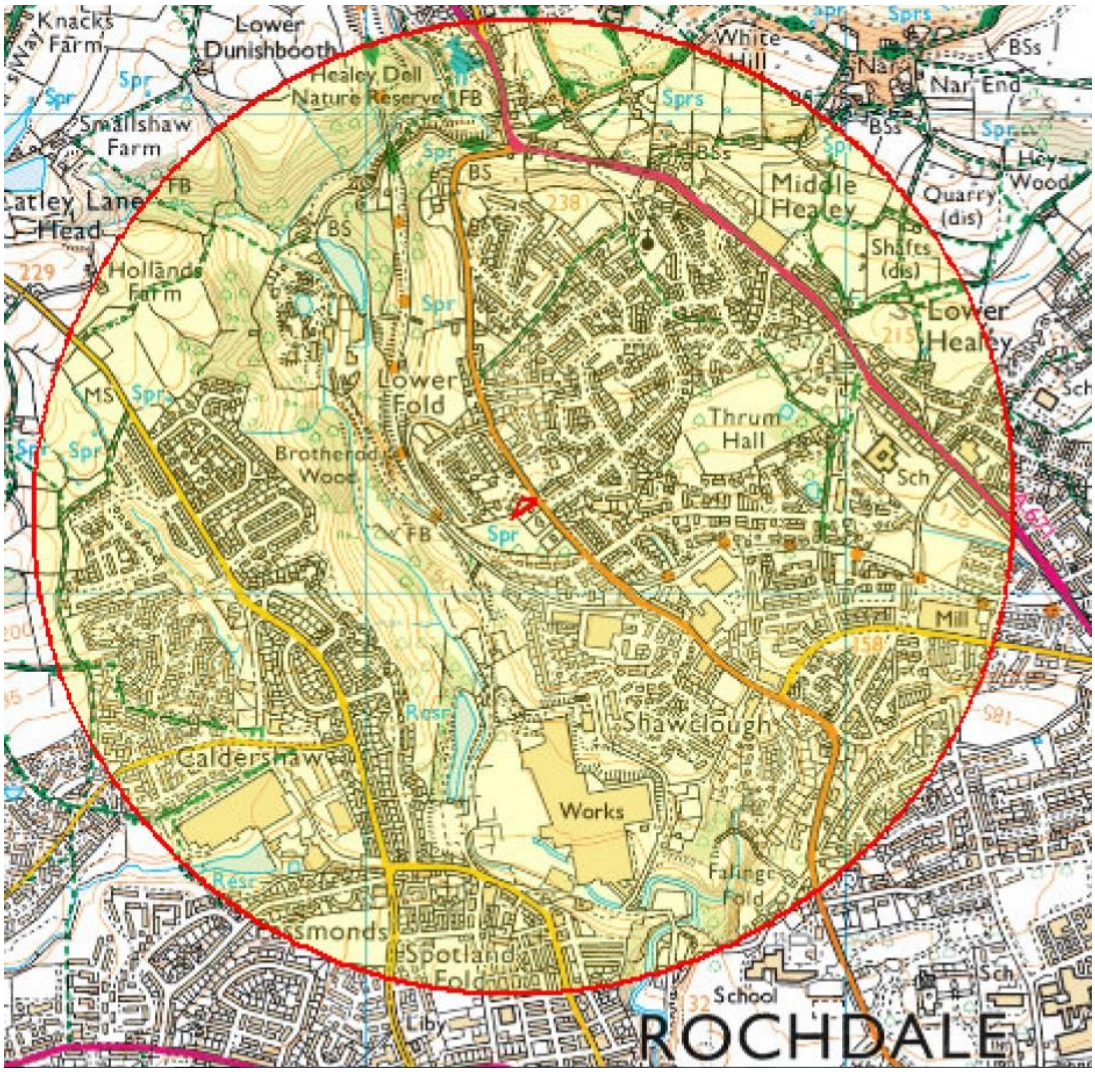
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## Figures




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| | |
|---|---|
| Project | The Harridge, Rochdale |
| Client: | Mr Matthews |
| Date: | 18/01/19 |
| Title: | **Figure 1** Site Plan and 1km Search Area |

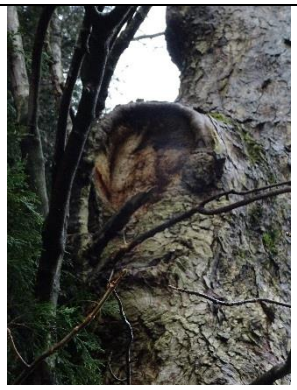



| | |
|---|---|
| Project | The Harridge, Rochdale |
| Client: | Mr Matthews |
| Date: | 08/01/19 |
| Title: | **Figure 2**<br>Target Notes |

# Appendix 1 - Walkover Survey Photographs

| Number | Description | Photograph |
|---|---|---|
| 1 | TN1 Hardstanding parking |  |
| 2 | TN2 Shrub understorey |  |
| 3 | TN3 Line of trees |  |
| 4 | TN4 Amenity grassland |  |

| | | |
|---|---|---|
| 5 | TN5 Wooden fence |  |
| 6 | TN6 Drystone wall |  |
| 7 | TN7 Gravel driveway |  |
| 8 | TN8 Mature sycamore No 990 |  |

| | | |
|---|---|---|
| | |  |
| 9 | TN8 Mature sycamore No 991 |  |
| 10 | TN8 Mature sycamore No 992 |  |
| 11 | TN8 Mature sycamore No 993 |  |

| | | |
|---|---|---|
| | |  |
| 12 | TN8 Mature sycamore No 994 |  |
| 13 | TN9 Line semi-mature cedar trees |  |

# Appendix 2 - Guidelines For Contractors Working in Proximity to Potential Bat Roosts

Although it is unlikely that bats will be encountered on this site, as they are a European Protected Species under the Conservation of Species and Habitats Regulations 2010 and Schedule 5 of the Wildlife and Countryside Act 1981 (as amended), is important that if they are found they are identified correctly and the relevant bodies notified.

It is an offence to intentionally kill, injure or take a bat.

It is also an offence to intentionally or recklessly damage, destroy or obstruct access to any place that a bat uses for shelter or protection or to disturb a bat whilst it is occupying such a place.

The potential fine for each offence is £5000. If more than one bat is involved the fine can be up to £5000 per bat. An offender can also be imprisoned for up to six months.



Adult pipistrelle in gloved hand



Whiskered bat in wall crevice

Signs to look for:

**Live or dead bats** - these can be found in various places in tress such as cracks and splits, in rot holes or cavities, in wood pecker holes, in damaged branches and behind ivy cladding. In buildings bats can be located throughout the loft space, within cracks and crevices in mortar, in voids in walls, in gaps in joists and behind soffits, cladding and ivy.

**Bat droppings** - can indicate a bat roost and can be found in all the places mentioned above as well as around the base of a trees and on walls. Bat droppings look like mouse droppings but will crumble between fingers as they are dry and made entirely of inset remains.

**Calls** - Bats can sometimes be heard making high pitched squeaking sounds during the day whilst in their roosts, these can become more urgent and noticeable if the bats are disturbed or in distress. However bats may also not make any noise if disturbed.

Contractors should be aware of the physical characteristics of bats, particularly their small size (an adult pipistrelle is only 4cm long and weighs 5g).

If bats are discovered they should not be handled by the general public as a specific Natural England licence is required to handle or disturb them. In addition a small number of bats in the UK have been identified as carrying a rabies virus called European Bat Lyssavirus (EBLV). If handling is absolutely essential to move bats away from immediate harm gloves must be worn. Bats should be placed in a container and removed to a safe place where a licensed bat worker can attend.

If bats are found on site contact Milner Ecology Ltd on 07980621006 for further advice.